

“Tetsu-to-Hagané”

Vol. 60, No. 2, February 1974

Contents

Foreword

On the Instrumental Analysis for Men.....*Nakaaki ODA*... 167

Technical Papers

Study of the Reduction of Iron Oxide Powder*A. ÔKURA*... 169

On the Experimental Study of Tuyer Model Ablation and Its Heat Transfer Analysis

.....*S. MATSUNAGA, H. YAMAOKA, M. KAWASAKI, and K. HARADA*... 177

Optical Absorption Spectra of Quenched Glassy slags

Containing Iron Oxide*T. ITO and K. GOTO*... 184

Liquid Steel Refining in the Ladle with Non-Oxidising

Synthetic Slag*K. OKOHIRA, N. SATÔ, and H. MORI*... 192

Determination of Solidifying Shell Thickness of Continuously

Cast Slab by Rivet Pin Shooting

.....*T. KAWAWA, H. SATO, S. MIYAHARA, T. KOYANO, and H. NEMOTO*... 206

Effect of Copper Addition on the Recrystallization Texture of

Low Carbon Steel Sheet*H. ABE, T. SUZUKI, and F. TOGAWA*... 217

Reverse Transformation of Low-carbon Low Alloy Steels

.....*S. MATSUDA and Y. OKAMURA*... 226

Effects of Phosphorus Addition on the Precipitation Behavior

of Carbides and the Age Hardening Properties in Austenitic Heat

Resisting Steels.....*M. YAMAMOTO, M. KOBAYASHI, O. MIYAGAWA, and D. FUJISHIRO*... 239

Kinetic Study of the Interverlation among Three Types of

$\gamma \rightarrow \alpha'$ Martensite Transformation in Iron Alloys.

.....*T. ARAKI, K. SHIBATA, and H. WADA*... 258

Effects of the Aged Structure and the Prior Austenite Grain

Size on Fracture Toughness of 18Ni Maraging Steels

.....*Y. KAWABE, M. KANAO, K. NAKAZAWA, and S. MUNEKI*... 269

On the Combination of Tensile Strength and Ductility of

High Tensile Strength Cold Rolled Steel Sheets and the

Metallurgical Factors.....*H. MASUI and H. TAKECHI*... 284

Technical Report

Review of Current Application of ESR and its Products.....*M. WAHLSTER*... 296

Technical Review

Recent Advances in the Mechanism of Hydrogen Embrittlement*Namio OHTANI*... 304

Abstracts.....317, Notices to Members.....N17, Proceedings of the Institute.....N25, News of Iron and Steel Standard Samples for Analysis.....N28

Overseas membership: Annual charges: ¥4500 (incl. postage) Initiation fee: ¥450

© The Iron and steel Institute of Japan, 1974